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Her Majesty's Government in Australia.  
 Her Majesty's Government in India.  
 The Lords Commissioners of the Admiralty.  
 The French Ministry of Public Instruction.  
 The German Government Transit of Venus Commission.  
 The Italian Government.  
 British Association for the Advancement of Science.  
 British Astronomical Association.  
 British Horological Institute.  
 Camera Club.  
 Geological Society of London.  
 Institution of Civil Engineers.  
 Meteorological Office.  
 Patent Office.  
 Photographic Society of Great Britain.  
 Physical Society of London.  
 Royal Geographical Society.  
 Royal Institution of Great Britain.  
 Royal Meteorological Society.  
 Royal Observatory, Greenwich.  
 Royal Society of London.  
 Royal United Service Institution.  
 Society of Arts.  
 University College, London.  
 Belfast Natural History and Philosophical Society.  
 Birmingham Philosophical Society.  
 Cambridge Philosophical Society.  
 Dublin, Royal Irish Academy.  
 Edinburgh, Royal Observatory.  
 Edinburgh, Royal Society.  
 Kew Observatory.  
 Leeds Philosophical and Literary Society.  
 Liverpool Observatory.  
 Manchester Literary and Philosophical Society.  
 Oxford, Radcliffe Library.  
 Rugby School Natural History Society.  
 Stonyhurst College Observatory.

Truro, Royal Institution of Cornwall.  
 Adelaide Observatory.  
 Amsterdam, Royal Academy of Sciences.  
 Australasian Association for the Advancement of Science.  
 Batavia, Magnetical and Meteorological Observatory.  
 Batavia, Royal Society of Natural History.  
 Belgium, Royal Observatory.  
 Berlin, Central International Geodetic Bureau.  
 Berlin, Physical Society.  
 Berlin, Royal Prussian Academy of Sciences.  
 Berlin, Royal Observatory.  
 Berlin, Royal Prussian Geodetic Institute.  
 Berne University.  
 Bologna, Royal Academy of Sciences.  
 Bombay Branch of the Royal Asiatic Society.  
 Bordeaux, Society of Physical and Natural Sciences.  
 Boston, American Academy of Arts and Sciences.  
 Brisbane, Royal Geographical Society of Australasia.  
 Brussels, Royal Academy of Sciences.  
 Buda-Pest, Hungarian Academy of Sciences.  
 Buda-Pest, Royal Hungarian Institute for Meteorology  
 and Terrestrial Magnetism.  
 Calcutta, Asiatic Society of Bengal.  
 Cape of Good Hope, Royal Observatory.  
 Chicago Exhibition, British Commission.  
 Cincinnati Observatory.  
 Coimbra Observatory.  
 Copenhagen, Royal Danish Academy of Sciences.  
 Cordoba, Argentine National Observatory.  
 Cracow, Academy of Sciences.  
 Dijon, Academy of Sciences, Arts and Letters.  
 Geneva, Society of Physics and Natural History.  
 Göttingen, Royal Society of Sciences.  
 Haarlem, Teyler Museum.  
 Halle, Leopold-Caroline Academy of Naturalists.  
 Harvard College Astronomical Observatory.  
 Haverford College Observatory.  
 Helsingfors, Geographical Society of Finland.  
 Helsingfors, Society of Sciences of Finland.  
 Hong Kong Observatory.  
 India, Survey Department.  
 International Geodetic Association.  
 Karlsruhe Observatory.  
 Kasan, Imperial University.  
 Kiel, Royal Observatory.  
 Leipzig, Astronomical Society.  
 Leipzig, Royal Saxon Society of Sciences.  
 Leyden Observatory.  
 Lick Observatory.  
 Madras, Government Observatory.

Madrid Observatory.  
 Manila, Meteorological Observatory.  
 Mauritius, Royal Alfred Observatory.  
 Melbourne Observatory.  
 Melbourne, Royal Society of Victoria.  
 Moncalieri Observatory.  
 Montpellier, Academy of Sciences.  
 Moscow, Imperial Society of Naturalists.  
 Moscow Observatory.  
 Munich, Royal Bavarian Academy of Sciences.  
 Naples, Academy of Sciences.  
 Natal Observatory.  
 Nebraska University.  
 New Haven, Connecticut Academy.  
 New York, Astor Library.  
 New York Mathematical Society.  
 Ogyalla, Astrophysical Observatory.  
 Ottawa, Canadian Meteorological Office.  
 Ottawa, Geological Survey of Canada.  
 Ottawa, Royal Society of Canada.  
 Paris, Academy of Sciences.  
 Paris, Astronomical Society of France.  
 Paris, Bureau of Longitude.  
 Paris, General Dépôt of Marine.  
 Paris, International Committee of Weights and Measures.  
 Paris, Mathematical Society of France.  
 Paris Observatory.  
 Paris, Philomathic Society of France.  
 Philadelphia, American Philosophical Society.  
 Philadelphia, Franklin Institute.  
 Potsdam, Astrophysical Observatory.  
 Prague, Imperial Observatory.  
 Rio de Janeiro Observatory.  
 Rome, Central Meteorological Office.  
 Rome, Italian Society of Sciences.  
 Rome, Italian Spectroscopic Society.  
 Rome, Royal Academy *dei Lincei*.  
 Rome, Vatican Observatory.  
 St. Petersburg, Imperial Academy of Sciences.  
 San Fernando Observatory.  
 San Francisco, Astronomical Society of the Pacific.  
 Stockholm, Royal Swedish Academy of Sciences.  
 Sydney, Government Observatory.  
 Sydney, Royal Society of New South Wales.  
 Tacubaya Observatory, Mexico.  
 Tasmania, Royal Society.  
 Tiflis, Physical Observatory.  
 Toronto, Astronomical and Physical Society.  
 Toronto, Canadian Institute.  
 Toronto University.

Toulouse, Academy of Sciences.  
 Turin, Observatory of the Royal University.  
 Turin, Royal Academy of Sciences.  
 Upsala, Royal Society of Sciences.  
 Vienna, Austrian Geodetic Commission.  
 Vienna, Imperial Academy of Sciences.  
 Vienna, International Geodetic Bureau.  
 Virginia, Leander McCormick Observatory.  
 Washburn Observatory of the University of Wisconsin.  
 Washington, Office of the American Ephemeris.  
 Washington, Smithsonian Institution.  
 Washington, United States Coast and Geodetic Survey.  
 Washington, United States Geological Survey.  
 Washington, United States Naval Observatory.  
 Yale University, Astronomical Observatory.  
 Yokohama, Seismological Society of Japan.  
 Zurich, Central Meteorological Institute.  
 Zurich, Natural History Society.  
 Editors of the "American Journal of Mathematics."  
 Editors of the "American Journal of Science."  
 Editor of the "Astronomical Journal."  
 Editor of "L'Astronomie."  
 Editor of the "Astronomische Nachrichten."  
 Editors of "Astronomy and Astro-Physics."  
 Editor of the "Athenæum."  
 Editors of the "Bulletin des Sciences Mathématiques."  
 Editor of "Engineering."  
 Editor of the "English Mechanic."  
 Editor of "Himmel und Erde."  
 Editor of "Indian Engineering."  
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 Editor of "Knowledge."  
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## ADDRESS

*Delivered by the President, Captain W. de W. Abney, C.B., R.E.,  
D.C.L., F.R.S., on presenting the Gold Medal to Professor  
S. W. Burnham.*

THE Gold Medal of the Royal Astronomical Society has been awarded by the Council to Mr. S. W. Burnham for his discovery and measurement of double stars; and following the custom of the Society, it is the duty of the President to lay before it the grounds on which the award has been made.

I can scarcely hope to do justice to the labours entailed in the extensive researches made by Mr. Burnham, and to his discoveries. I believe I am correct in stating that Mr. Burnham's first astronomical communication was made to the *English Mechanic*. It is, however, with his star catalogues and other later communications to which your attention must be drawn. The catalogues of double stars which he has given us amount to no fewer than nineteen containing 1,274 new double stars.

Burnham's first catalogue of new double stars, published in 1873, consisted of 81 pairs, which were discovered with a 6-inch Alvan Clark refractor at Chicago, and occupied his time from 1870 to 1872. The distances of the doubles in this, as in several of his first catalogues, were estimations and not exact measurements, his telescope not being furnished with a micrometer. It may here be incidentally remarked that during the discovery of some of these pairs he was in communication with Dembowski, who measured many of them, whilst others were measured by our Fellow, Mr. Knott, and appear in his catalogue. The measures by Dembowski were not published till after this observer's death, and were, comparatively speaking, recently (1888) printed by the Reale Accademia dei Lincei at Rome. The first catalogue contains several pairs which are very difficult to see with a 6-inch, even when they are known to be doubles. For instance—

Number in Catalogue.	Magnitudes.	Distances.
4	7 and $7\frac{1}{2}$	0.5
13	8 „ 12	1.0
63	6 „ 12	0.7